

## 802.11b/g MIMO XR<sup>®</sup> Wireless MiniPCI Card

The **WCM5202** is an IEEE802.11b/g standard mini PCI card that connects your notebook to a wireless local area. With MRC (Maximal Ratio Combining) technique, The **WCM5202** better expands the transmitting distance and efficiently eliminates wireless connection dead spots compared with normal 802.11b/g products. Moreover, the Burst transmission mode also accelerates the throughput and improves the actual transmission rate.

The **WCM5202** is a very small card that can fit into any notebook, handheld or desktop computer equipped with a Mini PCI (Type III B slot) interface for wireless network



applications. It allows you to take full advantage of your notebook's mobility with access to realtime information and online services anytime and anywhere. It slides easily into the MINI PCI expansion slot to enable a wireless connection to your network.

## **FEATURES**

- III-b MiniPCI form factor
- Support 802.11b/g
- 1T2R Architecture, with extended range and dead spot eliminated
- Complete Security Feature WEP 64/128, WPA, WPA2, 802.1x and 802.11i
- Cisco CCX V1.0, V2.0 and V3.0 Compliance
- Advanced Quality of Service (QoS) -802.11e, WMM
- International Regulatory Compliance -802.11d+h
- Bluetooth Co-existence
- Comprehensive OS support: Win98/SE/ME, Win2000, WinXP, WinCE, Linux, MAC OSX
- Linux AP Driver Available
- WiFi and WHQL Certification

## **SPECIFICATIONS**

Standard	IEEE 802.11b/g Standard
Host Interface	MiniPCI Interface 1.0
Operating Voltage	$3.3V \pm 5\%$
Power Requirement	Power consumption at 11g TX: 455mA RX: 317mA
RF Connector Type	3
Frequency Range	2.412GHz-2.4835GHz
Number of Selectable Channels	USA, Canada (FCC): 11 channels (2.412GHz~2.462GHz) Europe (CE): 13 channels (2.412GHz~2.472GHz) Japan (TELEC): 14 channels (2.412GHz~2.4835GHz)
Modulation Technique	<b>802.11b:</b> Direct Sequence Spread Spectrum (CCK, DQPSK, DBPSK) <b>802.11g:</b> Orthogonal frequency division multiplexing
Data Rate	802.11b (11 Mbps, 5.5 Mbps, 2 Mbps, 1 Mbps) 802.11g (54 Mbps, 48 Mbps, 36 Mbps, 24 Mbps, 18 Mbps, 12 Mbps, 9 Mbps, 6 Mbps)
Preamble	802.11b: Both Short and Long preamble
	802.11g: Long preamble only
Modulation	<b>11g: Orthogonal Frequency Division Multiplexing (OFDM)</b> 54Mbps/48Mbps: QAM-6436Mbps/24Mbps: QAM-1618Mbps/12Mbps: QPSK9Mbps/6Mbps: BPSK <b>11b: Direct Sequence Spread Spectrum (DSSS)</b> 11Mbps/5.5Mbps: CCk2Mbps: DQPSK1Mbps: DBPSK
Security	Hardware-Based Encryption/Decryption Using WEP 64/128, WPA, WPA2, 802.1x and 802.11i
Output Power	54Mbps OFDM: 18~20dBm 11Mbps CCK: 21dBm
Receiver Sensitivity	-79dBm at 54Mpbs, 10% PER <-90dBm at 11Mpbs, 8% PER
Media Access Protocol	CSMA/CA (Collision Avoidance) with ACK
Physical Specifications	Weight: 10g Dimension: 59.75 (L) x 44.6(W) mm
Environment Specifications	<b>Operating Temperature:</b> 0~60°C ambient temperature <b>Storage Temperature:</b> -20~70°C ambient temperature <b>Operating humidity:</b> 90% maximum (non-condensing) <b>Storage humidity:</b> 90% maximum (non-condensing)
EMC Certification	FCC Part 15.247 in US